

Appl. No.: 09/826,697
Andt. dated July 11, 2005
Reply to Office Action of March 10, 2005

PATENT

Amendment

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please amend claims 1-5, 7-10, 12-14, 16-18, and 20-22, without prejudice.

Please add new claims 24-26.

1. (Currently Amended) A method of testing the Quality of Service (QoS) of voice transmissions a component in a voice-over-IP network path comprising:
performing a diagnostic procedure to identify one or more possibly faulty components among a plurality of network resources that reside in a plurality of transmission paths;
determining a path of the plurality of transmission paths from a VoIP client to a destination node, the path including at least one of the one or more possibly faulty components identified by the diagnostic procedure;
sending a digital audio file from the VoIP client to the destination node through the determined path; through the component to a destination;
recording the digital audio file at the destination; and
measuring characteristics of the digital audio file at the destination node according to analyze the QoS of the transmission; and component.
determining if one of the one or more possibly faulty components in the determined path is faulty.

2. (Currently Amended) The method of claim 1 further comprising polling at least one of the one or more possibly faulty components the component for status information.

3. (Currently Amended) The method of claim 2 further comprising generating a call

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history of at least one of the one or more possibly faulty components the component based on the status information.

4. (Currently Amended) The method of claim 1 further comprising repeating the sending, sending and recording.

5. (Currently Amended) The method of claim 1 further comprising repeating the sending, measuring, and determining, recording, and measuring.

6. (Original) The method of claim 1 wherein the digital audio file is a WAV file.

7. (Currently Amended) The method of claim 1 wherein at least one of the one or more possibly faulty components the component is a software client.

8. (Currently Amended) The method of claim 1 wherein at least one of the one or more possibly faulty components the component is a hardware module.

9. (Currently Amended) The method of claim 1 further comprising generating a call history of at least one of the one or more possibly faulty components the component based on the measuring of the digital audio file at the destination node, recording.

10. (Currently Amended) A voice-over-IP network comprising:

a plurality of network resources;

a source node selected from the plurality of network resources; source node;

a destination node selected from the plurality of network resources;

a test tool capable of performing a diagnostic procedure to identify one or more possibly faulty components among the plurality of network resources that reside a plurality of transmission paths between the source node and the destination node;

a determined path connecting the source node through at least one or more

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of the identified possibly faulty components a component to a the destination node; and
an analyzer connected to the destination node to measure characteristics of
a digital audio file received by the destination node and determine if one or more of the
one or more possibly faulty components among the plurality of network resources that
reside a plurality of transmission paths between the source node and the destination node is
faulty.

11. (Original) The network of claim 10 wherein the digital audio file is contained in a digital audio store.

12. (Currently Amended) The network of claim 10 wherein the test tool is further
comprising a test tool accessible by the source node to poll the component for status
information.

13. (Currently Amended) The system of claim 10 wherein at least one or more of the
possibly faulty components among the plurality of network resources the component is a software client.

14. (Currently Amended) The system of claim 10 wherein at least one or more of the
possibly faulty components among the plurality of network resources the component is a hardware module.

15. (Original) The system of claim 10 wherein the digital audio file is a wav file.

16. (Currently Amended) A computer program product residing on a computer readable medium, the computer program comprising instructions that cause the computer to:

~~record a digital audio file received at a destination, the digital audio file~~

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being sent through a component; and
measure characteristics of the recording to analyze the component;
perform a diagnostic procedure to identify one or more possibly faulty components
among a plurality of network resources that reside in a transmission path;
determine a path from a VoIP client to a destination node, wherein the path includes
the one or more possible faulty components identified by the diagnostic procedure;
send a digital audio file from the VoIP client to the destination node through the
determined path;
measure characteristics of the digital audio file to analyze the QoS of the
transmission; and
determine if one of the one or more possibly faulty components is faulty.

17. (Currently Amended) The computer program product of claim 16 wherein at least
one of the one or more possibly faulty components the component is a software client.

18. (Currently Amended) The computer program product of claim 16 wherein at least
one of the one or more possibly faulty components the component is a hardware module.

19. (Original) The computer program product of claim 16 wherein the digital audio file
is a wav file.

20. (Currently Amended) A computer program product residing on a computer readable
medium comprises instructions that cause the computer to:

send a digital audio file to a destination through a component; and
poll the component for status information;
perform a diagnostic procedure to identify one or more possibly faulty components
among a plurality of network resources that reside in a transmission path;
determine a path from a VoIP client to a destination node, wherein the path includes

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the one or more possible faulty components identified by the diagnostic procedure;
send a digital audio file from the VoIP client to the destination node through the
determined path.

21. (Currently Amended) The computer program product of claim 20 wherein at least
one or more of the possibly faulty components among the plurality of network resources
the component is a software client.

22. (Currently Amended) The computer program product of claim 20 wherein at least
one or more of the possibly faulty components among the plurality of network resources
the component is a hardware module.

23. (Original) The computer program product of claim 20 wherein the digital audio file
is a wav file.

24. (New) The method of claim 1, further comprising recording the digital audio file at
the destination node and wherein measuring characteristics of the digital audio file at the
destination node comprises measuring characteristics of the recording.

25. (New) The method of claim 1, wherein determining if one of the one or more
possibly faulty components in the determined path is faulty comprises routing the digital
audio file around at least one of the one or more possibly faulty components and
determining if a change in the QoS of the voice transmission exists.

26. (New) The computer program product of claim 20, wherein the readable medium
further comprises instructions that cause the computer to poll at least one of the one or
more possibly faulty components for status information.